# **Complete Summary**

### TITLE

Preventive and developmental health care for young children: average percentage of individual care components (assessed in the Promoting Healthy Development Survey [PHDS]) a child received.

# SOURCE(S)

Bethell C, Peck C, Schor E. Assessing health system provision of well-child care: the Promoting Healthy Development Survey. Pediatrics2001 May;107(5):1084-94. PubMed

Bethell C, Reuland CH, Halfon N, Schor EL. Measuring the quality of preventive and developmental services for young children: national estimates and patterns of clinicians' performance. Pediatrics2004 Jun;113(6 Suppl):1973-83. <a href="PubMed">PubMed</a>

Child and Adolescent Health Measurement Initiative (CAHMI). Bethell C, Peck Reuland C, Walker C, Brockwood K, Latzke B, Read D. In-office administration of the promoting healthy development survey - reduced-item version. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; 79 p.

Child and Adolescent Health Measurement Initiative (CAHMI). Promoting healthy development survey - PLUS (PHDS-PLUS). Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; various p.

Child and Adolescent Health Measurement Initiative (CAHMI). The promoting healthy development survey. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; 2001. 16 p.

# **Measure Domain**

### PRIMARY MEASURE DOMAIN

**Process** 

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the <a href="Measure Validity">Measure Validity</a> page.

# SECONDARY MEASURE DOMAIN

Patient Experience

### **DESCRIPTION**

This measure is used to assess the average percentage of individual care component measures in the Promoting Healthy Development Survey (PHDS) that a child received.

Note: A composite score is calculated in which a higher score indicates better quality.

### **RATIONALE**

The Promoting Healthy Development Survey (PHDS) measures various aspects of health care that are recommended by the American Academy of Pediatrics and the Maternal Child Health Bureau. This measure provides information about how many, on average, of the care components each child receives. Therefore, it provides information about the degree to which children are receiving all aspects of recommended care.

This measure reflects the interests of parents, the comprehensive care which is recommended, and is sensitive to assessing improvements. Significant opportunities for improvement exist in ensuring that young children and families receive recommended preventive and developmental health care services. A growing body of literature supports the delivery of parental anticipatory guidance, assessment follow-up on the development of children, and assessment of the psychosocial well-being of families. Few quality measures have been available that provide specific information about preventive health care for young children, especially on aspects of care for which parents and families are a reliable source of information about the quality of their child's health care. The PHDS provides direct feedback from parents about the delivery and quality of preventive services for their children.

The PHDS was developed for the purpose of assisting providers, consumers, purchasers, and policymakers in assessing the degree to which health plans and practitioners provide developmental services as recommended in guidelines set forth by the American Academy of Pediatrics and the Maternal and Child Health Bureau's Bright Futures initiative.

### PRIMARY CLINICAL COMPONENT

Preventive and developmental health care for young children

### **DENOMINATOR DESCRIPTION**

Children age 3 months to 48 months who received a well-child visit in the last 12 months and have scores to each of the core Promoting Healthy Development Survey (PHDS) quality measures assessing specific care components

## **NUMERATOR DESCRIPTION**

The number of individual care components that a child received (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

## **Evidence Supporting the Measure**

## **EVIDENCE SUPPORTING THE CRITERION OF QUALITY**

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
- Focus groups
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

# **Evidence Supporting Need for the Measure**

### **NEED FOR THE MEASURE**

Overall poor quality for the performance measured Use of this measure to improve performance

#### **EVIDENCE SUPPORTING NEED FOR THE MEASURE**

Bethell C, Peck C, Abrams M, Halfon N, Sareen H, Scott Collins K. Partnering with parents to promote the healthy development of young children enrolled in Medicaid: results from a survey assessing the quality of preventive and developmental services for young children enrolled in Medicaid in three states. New York (NY): Commonwealth Fund; 2002 Sep. 53 p.

Bethell C, Peck C, Schor E. Assessing health system provision of well-child care: the Promoting Healthy Development Survey. Pediatrics2001 May;107(5):1084-94. PubMed

Bethell C, Reuland CH, Halfon N, Schor EL. Measuring the quality of preventive and developmental services for young children: national estimates and patterns of clinicians' performance. Pediatrics2004 Jun;113(6 Suppl):1973-83. PubMed

# **State of Use of the Measure**

### **STATE OF USE**

Current routine use

# **CURRENT USE**

Collaborative inter-organizational quality improvement External oversight/Medicaid Internal quality improvement National reporting Quality of care research

# **Application of Measure in its Current Use**

### **CARE SETTING**

**Ambulatory Care** 

### PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses Nurses Physician Assistants Physicians

### LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

**Individual Clinicians** 

# **TARGET POPULATION AGE**

Children age 3 months to 48 months

## **TARGET POPULATION GENDER**

Either male or female

# STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

# **Characteristics of the Primary Clinical Component**

# INCIDENCE/PREVALENCE

Unspecified

## **ASSOCIATION WITH VULNERABLE POPULATIONS**

Unspecified

## **BURDEN OF ILLNESS**

Unspecified

### **UTILIZATION**

Unspecified

### **COSTS**

# **Institute of Medicine National Healthcare Quality Report Categories**

### **IOM CARE NEED**

Staying Healthy

### **IOM DOMAIN**

Effectiveness Patient-centeredness

## **Data Collection for the Measure**

### **CASE FINDING**

Users of care only

### **DESCRIPTION OF CASE FINDING**

Children age 3 months to 48 months who received a well-child visit in the last 12 months

### **DENOMINATOR SAMPLING FRAME**

Patients associated with provider

## **DENOMINATOR INCLUSIONS/EXCLUSIONS**

# **Inclusions**

Children age 3 months to 48 months who received a well-child visit in the last 12 months and have scores to each of the core Promoting Healthy Development Survey (PHDS) quality measures assessing specific care components

### **Exclusions**

Unspecified

## **RELATIONSHIP OF DENOMINATOR TO NUMERATOR**

All cases in the denominator are equally eligible to appear in the numerator

# **DENOMINATOR (INDEX) EVENT**

Encounter Patient Characteristic

### **DENOMINATOR TIME WINDOW**

Time window precedes index event

# **NUMERATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

The number of individual care components that a child received

From the responses, a composite measure score is calculated\* in which a higher score is associated with better quality.

\*Note: Scoring process:

- For each individual care component in the Promoting Healthy Development Survey (PHDS) (12
  quality measures specific to specific care components are eligible to be included [e.g.,
  Anticipatory Guidance and Parental Education, Asking about and Addressing Parental Concerns],
  most users only include the process of care measures and not the experience of care measures),
  binomial variables are created that indicate whether the child received a sufficient level of quality
  care for the specific aspect of care.
- 2. The mean is then calculated across these binomial variables.

### **Exclusions**

Unspecified

# MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

### **NUMERATOR TIME WINDOW**

Encounter or point in time

### **DATA SOURCE**

Patient survey

## LEVEL OF DETERMINATION OF QUALITY

Individual Case

### PRE-EXISTING INSTRUMENT USED

Unspecified

# **Computation of the Measure**

### **SCORING**

Non-weighted Score/Composite/Scale

### **INTERPRETATION OF SCORE**

Better quality is associated with a higher score

### **ALLOWANCE FOR PATIENT FACTORS**

Analysis by high-risk subgroup (stratification on vulnerable populations)
Analysis by subgroup (stratification on patient factors, geographic factors, etc.)

### **DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS**

Although no stratification is required, the Promoting Healthy Development Survey (PHDS) includes a number of variables that allow for stratification of the findings by possible vulnerability:

- Child demographic characteristics (e.g., the child's age, race)
- Child health and descriptive characteristics (e.g., children at high risk for developmental, behavioral or social delays, special health care needs)
- Parent health characteristics (e.g., children whose parents are experiencing symptoms of depression)

### STANDARD OF COMPARISON

External comparison at a point in time External comparison of time trends Internal time comparison

# **Evaluation of Measure Properties**

### **EXTENT OF MEASURE TESTING**

# 2000: A Majority of the PHDS Included in the National Survey of Early Childhood Health (NSECH)

 Psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity and internal consistency (reliability). These findings are displayed in the article, "Measuring the quality of preventive and developmental services for young children: National estimates and patterns of clinicians' performance."

# 2001-2003: Development and Implementation of the Provider-Level PHDS. October 2001-March 2003

- Focus groups and cognitive interviews with 35 health care providers in Vermont and Washington and 20 parents of young children in Vermont to inform item-reduction, administration specifications, and reporting templates.
- Psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity and internal consistency (reliability). These findings are displayed in the CAHMI reports, "Overview of the Round 1

Implementation of the PHDS in Mousetrap" and "University Pediatrics: Round 2 -- In-Office Implementation of the PHDS Key Findings."

# 2002-2004: Implementation by Telephone in Four Medicaid Agencies

 Psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity and internal consistency (reliability). These findings are displayed in the CAHMI report, "Hearing the Voices of Parents: Results from a Survey Assessing the Quality of Preventive and Developmental Services for Young Children Enrolled in Medicaid in Four States."

# December 2003 - March 2004 Implementation of the PHDS in Kaiser Permanente, System, Office and Provider-Level Analysis Conducted

 Psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity and internal consistency (reliability). These findings are displayed in the draft publication, "What drives the quality of preventive and development services provided to young children? Findings from a multi-level, provider and patient-centered method to assess quality."

# Fall 2003 - August 2004 Implementation of the ProPHDS in the Healthy Development Collaborative

 ProPHDS administerd by mail and in-offices. Psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity and internal consistency (reliability). These findings are displayed in the draft publication, "Assisting primary care practices in using office systems to promote early childhood development."

# January - March 2006 Implementation of Three Boston-area Community Health Centers

 Psychometric analyses demonstrated that the PHDS quality measure scales have strong construct validity and internal consistency (reliability). These findings are displayed in the draft publication, "Associations of Language and Cultural Competence with Latino Parents' Views of Their Children's Well Child Care."

### **EVIDENCE FOR RELIABILITY/VALIDITY TESTING**

Bethell C, Peck C. Medicaid parents experience with the health care system: summary of findings from a survey of parents of young children enrolled in Medicaid in three ABCD states. New York (NY): Commonwealth Fund; 2001.

Bethell C, Reuland CH, Halfon N, Schor EL. Measuring the quality of preventive and developmental services for young children: national estimates and patterns of clinicians' performance. Pediatrics2004 Jun;113(6 Suppl):1973-83. <a href="PubMed">PubMed</a>

Child and Adolescent Health Measurement Initiative (CAHMI). Overview of the round 1 implementation of the PHDS in mousetrap and university pediatrics.

Portland (OR): Child and Adolescent Health Measurement Initiative (CAHMI); 27 p.

Child and Adolescent Health Measurement Initiative (CAHMI). What drives the quality of preventive and development services provided to young children? Findings from a multi-level, provider and patient-centered method to assess quality. Portland (OR): Child and Adolescent Health Measurement Initiative (CAHMI); 2006. 38 p. [60 references]

Reuland C, Bethell C. Hearing the voices of parents: measuring and improving preventive and developmental services provided to young children. Portland (OR): Child and Adolescent Health Measurement Initiative (CAHMI); 2004 Jun. 97 p.

# **Identifying Information**

### **ORIGINAL TITLE**

Composite measure of preventive and developmental health care for young children: average percentage of care components received.

#### **MEASURE COLLECTION**

Promoting Healthy Development Survey (PHDS)

### **MEASURE SET NAME**

Preventive and Developmental Health Care for Young Children

### **COMPOSITE MEASURE NAME**

Average Percentage of Care Components Received

# **DEVELOPER**

Child and Adolescent Health Measurement Initiative

### **FUNDING SOURCE(S)**

The Commonwealth Fund

# **COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE**

Christina Bethell, PhD, MBA, MPH; Colleen Reuland, MS; Brooke Latzke, BS

### FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST

None

### **ENDORSER**

National Quality Forum

### **ADAPTATION**

Measure was not adapted from another source.

### **RELEASE DATE**

2001 Jan

### **REVISION DATE**

2006 Dec

#### **MEASURE STATUS**

This is the current release of the measure.

# SOURCE(S)

Bethell C, Peck C, Schor E. Assessing health system provision of well-child care: the Promoting Healthy Development Survey. Pediatrics2001 May;107(5):1084-94. PubMed

Bethell C, Reuland CH, Halfon N, Schor EL. Measuring the quality of preventive and developmental services for young children: national estimates and patterns of clinicians' performance. Pediatrics2004 Jun;113(6 Suppl):1973-83. PubMed

Child and Adolescent Health Measurement Initiative (CAHMI). Bethell C, Peck Reuland C, Walker C, Brockwood K, Latzke B, Read D. In-office administration of the promoting healthy development survey - reduced-item version. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; 79 p.

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Child and Adolescent Health Measurement Initiative (CAHMI). The promoting healthy development survey. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative; 2001. 16 p.

### **MEASURE AVAILABILITY**

The individual measure, "Composite Measure of Preventive and Developmental Health Care for Young Children: Average Percentage of Care Components Received," is published in "Promoting Healthy Development Survey (mail version)," "In-office Administration of the Promoting Healthy Development Survey - Reduced-item Version (Office version)," and "Promoting Healthy Development Survey - PLUS (PHDS-PLUS) (telephone version)." This survey is available from the Child and Adolescent Health Measurement Initiative (CAHMI) Web site.

For further information, please contact the Child and Adolescent Health Measurement Initiative (CAHMI) at: 707 SW Gaines Street, Portland, OR 97239-3098; Phone: 503-494-1930; Fax: 503-494-2473; Web site: <a href="https://www.cahmi.org">www.cahmi.org</a>.

### **COMPANION DOCUMENTS**

The following are available:

- Child and Adolescent Health Measurement Initiative (CAHMI). The promoting healthy development survey: implementation guidelines. Portland (OR):
   CAHMI The Child and Adolescent Health Measurement Initiative, Oregon Health & Science University; 179 p. This document is available in Portable Document Format (PDF) from the <a href="Child and Adolescent Health Measurement">Child and Adolescent Health Measurement</a> Initiative (CAHMI) Web site.
- Child and Adolescent Health Measurement Initiative (CAHMI). The promoting healthy development survey - PLUS: implementation guidelines. Portland (OR): CAHMI - The Child and Adolescent Health Measurement Initiative, Oregon Health & Science University; 320 p. This document is available in PDF from CAHMI Web site.

# **NQMC STATUS**

This NQMC summary was completed by ECRI Institute on November 28, 2007. The information was verified by the measure developer on January 3, 2008.

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